

For All Our Children

Washington State Child Death Review (CDR)



Priority Focus:
Preventing SIDS and
Motor Vehicle Crash Deaths

March 2003





WASHINGTON STATE CHILD DEATH REVIEW STATE COMMITTEE RECOMMENDATIONS

March 2003

Working to Save Lives ...

An average of 765 Washington State children die each year. Hundreds of these deaths could be prevented through the implementation of statewide and local prevention strategies. In an effort to lead this important prevention work, Washington State created the **Child Death Review (CDR) program**. The CDR program is the result of a unique collaboration among the Washington Department of Health, the Department of Social and Health Services and local review teams that provides both statewide prevention recommendations and strategies tailored for individual communities.

More than 400 volunteer experts – from a range of backgrounds in healthcare, social services, law enforcement and government – serve on 29 community-based teams to review the unexpected deaths of children and to recommend ways to prevent them. A statewide advisory committee reviews data gathered by local teams and identifies trends and prevention strategies for the entire state.

The CDR Program reviews deaths of children who have unexpectedly lost their lives. Our responsibility is to determine any preventable circumstances in these deaths and consider strategies to improve overall health and safety for all children.

Improving the health of all our children ...

The Child Death Review State Committee reviewed 1999-2000 data collected by local review teams on the unexpected deaths of children between birth and age 18. The two leading causes of

For a copy of the complete 1999 CDR report: www.doh.wa.gov/cfh/mch/MCHAssesshome.htm

unexpected death for children in Washington State are Sudden Infant Death Syndrome (SIDS) and motor vehicle crashes. CDR

estimates that half of these unexpected deaths due to SIDS and motor vehicle crashes could have been prevented through education and improvements in legislation, policy and practice.¹

Based on this information, the CDR State Committee makes the recommendations on the pages that follow. The committee encourages all stakeholders – including parents and caregivers, legislators, healthcare leaders, community organizations, law enforcement and media to help implement these recommendations. By working together we can improve the health of all our children.

The CDR State Committee is comprised of community leaders in healthcare, law enforcement, social services, research and government.

PRIORITY: SUDDEN INFANT DEATH SYNDROME (SIDS)

Key CDR State Committee Recommendations

- Promote Safe Sleep Environments Encourage targeted, culturally appropriate programs that educate parents about safe sleep environments for infants.
- Reduce Tobacco Smoke Exposure Raise awareness of the harmful effects of secondhand smoke for infants, both before and after birth.
- Improve Death Scene Investigations Provide training and support for death scene investigators to conduct thorough investigation of infant deaths.

Background on SIDS

Sudden Infant Death Syndrome is the sudden death of an infant under one year of age that remains unexplained after complete investigation, including scene investigation, full autopsy and a review of case history. While research has not determined the definitive causes for SIDS, there are *recognized risk factors*:

- · Placing an infant to sleep on her or his stomach or side
- Soft bedding
- Exposure to second-hand smoke
- Overheating

We are aware of the possibility of co-sleeping being a risk factor for sudden infant death, particularly when other risk factors are present. CDR is actively collecting data to assess this risk. In the meantime, parents should consult with their pediatrician or follow the recommendations of the SIDS Foundation of Washington.

Since 1992, Washington's "Back to Sleep" campaign has sought to raise awareness of the need to put infants to sleep on their backs. Since the campaign started, overall SIDS deaths have decreased by 41%. Although SIDS deaths have decreased for all groups, rates remain higher in African American and Native American communities.

In the combined years of 1999 and 2000 there were 145 SIDS deaths in Washington, 127 of which were reviewed by local CDR teams. Eighty-seven percent of the SIDS deaths reviewed had at least one of the recognized risk factors mentioned above. Based on information gained from these reviews, the CDR State Committee determined that there are three strategies that could help to prevent future SIDS deaths. They are:

- 1. Promote safe sleep environments
- 2. Reduce tobacco smoke exposure
- 3. Improve death scene investigation

Recommendation 1: Promote Safe Sleep Environments

The risk of SIDS can be reduced by putting infants to sleep on their backs on a firm, safe surface. Of the 127 deaths reviewed, only 28% of the infants were discovered sleeping on their backs and 57% were sleeping in a location not designed for infant sleep.³ By comparison, in 1999-2000, 70% (±2%) of new mothers responding to the Pregnancy Risk

Assessment Monitoring System (PRAMS) survey reported they most often put their infants on their backs to sleep. Hispanics, African American, and women on Medicaid were less likely to report that they most often put their babies on their backs to sleep than were other groups.

The CDR State Committee recommends:

- Support for programs that educate about safe sleep environments, especially those
 addressed to high-risk populations. For example, First Steps, a program that provides
 maternity support services and case management for Medicaid clients, educates providers
 regarding risk factors for SIDS. Other outreach and prevention forums include the
 Women, Infants and Children (WIC) program, faith communities, childcare providers and
 family centers.
- Partnering to reach minority communities where the risk reduction messages have been less effective. For example, staff from the First Steps and the SIDS Foundation of Washington are partnering with community programs to bring the Safe Sleep message to the African American community. The CDR State Committee urges public health leadership across the state to convene forums with African American and Native American communities to create a coordinated, unified and field-tested message.
- *Integrating information into perinatal education* to inform parents about safe sleep environments for their newborn.

Recommendation 2: Reduce Tobacco Smoke Exposure

Exposure to tobacco smoke by infants, both during and after pregnancy, is a known – and preventable – risk factor for SIDS. In the SIDS deaths reviewed by the CDR teams, more than a third of the infants had mothers who smoked prenatally (35%) or were exposed to second-hand smoke (39%). Postpartum smoking rates continue to be higher in the Native American community and among lower socio-economic groups. According to 1999-2000 data from the PRAMS survey, 36% ($\pm 5\%$) of Native American women reported they smoked tobacco. This is almost double the rate of African American and white women. Approximately 26% ($\pm 4\%$) of new mothers on Medicaid reported postpartum smoking compared to only 10% ($\pm 2\%$) of non-Medicaid mothers.

The CDR State Committee recommends:

- Support for programs that work one-on-one with parents as well as providers to both raise awareness of the harmful effects of tobacco smoke and provide support for smoking cessation.
- *Support for programs* that address the relationship between environmental smoke and increased SIDS risk.

Recommendation 3: Improve Documentation of Death Scene Investigation

Because we still do not know the exact causes of SIDS, it is vital that all unexplained infant deaths be accurately investigated and diagnosed. Data from infant scene investigations are needed to teach us about the risk factors for SIDS and guide our prevention efforts. Yet, of the SIDS deaths reviewed by the CDR teams, more than 25% included no information about the death scene investigation and many were missing information about critical risk factors: 44% of the reviews had no information on firmness of bedding, 40% of the reviews had no information on prenatal smoke exposure, 31% had no information on exposure to second-hand smoke, 22% had no information on position at discovery and 5% had no information on sleeping location.

Better reporting and utilization of this kind of information is an achievable goal because all coroners and medical examiners in the state have access to training and guidelines for infant death investigation and at least one coroner or medical examiner serves on each CDR team.

The CDR State Committee recommends:

- *Training for all CDR teams* on the importance of including accurate death scene investigation information in the review of infant deaths. It is critical that all sudden infant deaths be thoroughly investigated and reviewed so we have an accurate picture of these tragic losses.
- Support for standardized death scene and autopsy procedures as specified by state law and supported by the Washington State Forensic Investigations Council. The statute provides adequate reimbursement when standard infant death investigation protocols are followed.

Other Issues for Consideration

In order to implement the CDR recommendations, there are other issues that will also need to be addressed. The CDR State Committee recommends:

- Support for training for first responders and death investigators (both on the scene and autopsy investigation).
- *Strong Public Health involvement* in helping to reduce SIDS risk. This includes tracking SIDS rates, monitoring new research and leading prevention efforts.
- Support for programs that provide services for economically stressed families with young children.
- Increased education for childcare providers to understand safe sleep environments.
- Convening a statewide forum to identify and coordinate community resources for SIDS prevention efforts. As SIDS death rates have declined, financial and human resources have also been reduced. New strategies are needed to determine the best use of resources.

PRIORITY: SUDDEN INFANT DEATH SYNDROME

What Can WE Do About SIDS?

Parents & Caregivers

- Always put infants to sleep on their backs.
- Put infants to sleep on a safe, firm surface, away from loose fabric or padded bumpers.
- Quit smoking during pregnancy.
- Maintain a smoke-free environment in the home.

Legislative Action

- Support SIDS prevention programs.
- Support tobacco cessation programs.
- Support training resources for first responders and death investigators.

Healthcare and Community Leaders

• Public Health officials can track SIDS deaths, monitor new research and take the lead in local prevention efforts.

Support SIDS prevention programs.

- Reach minority communities with SIDS prevention messages.
- Support tobacco cessation programs.
- Participate in statewide efforts to create new strategies to prevent SIDS deaths.
- Encourage training for first responders and ensure review of all SIDS deaths.

Media

- Inform the public about SIDS prevention programs, including "Back to Sleep."
- Reach minority communities with SIDS messages.
- Inform the public about smoking cessation programs.

MOTOR VEHICLE CRASH DEATHS AND INJURIES

Key CDR State Committee Recommendations

- Enforce and educate about Graduated Drivers Licensing (GDL) Encourage programs
 that educate parents, law enforcement and teens about Washington's new GDL system,
 and strictly enforce it.
- Enforce primary seatbelt laws Seatbelts save lives and our current laws should be strictly enforced.
- Enhance DUI penalties Penalties should be increased for adults who drive while impaired with children in the car.

Background on Motor Vehicle Crash Deaths

Motor vehicle crashes (MVC) are the leading cause of injury deaths of children between birth and 18 in Washington state, accounting for an average of 90 deaths per year. This mirrors national statistics, where vehicle crashes caused more than 43,000 deaths in 1998 and were the leading cause of death for persons under 34 years of age. The toll is staggering: MVC related injuries and deaths cost the United States \$150 billion annually in property damage, lost productivity and medical expenses, not to mention human suffering. Among teens, ages 16-18, the crash risk is especially high.

In 1999 and 2000, local CDR teams reviewed 138 of the 175 MVC deaths of Washington State children. Teams concluded that 76% of these deaths were preventable. Washington state currently supports a range of prevention and intervention efforts recommended by national organizations including laws and education programs for use of child safety seats, use of seat belts and efforts to reduce alcohol-impaired driving. But more can be done.

Because teens have the highest crash risk of all age groups (rates for 16-18 year olds are *four times higher* than 25-69 year olds), the CDR State Committee focused its recommendations on addressing teen motor vehicle crash deaths. They are:

- 1. Enforce and educate about Graduated Drivers Licensing.
- 2. Enforce primary seatbelt law.
- 3. Enhance DUI penalties.

Recommendation 1: Enforce and Educate About Graduated Drivers Licensing

In more than half (52%) of the MVC deaths where the child was in a car, van, sport utility vehicle or truck reviewed by local CDR teams in Washington, the driver was under age 19.5 Teen drivers, especially 16-year-olds, have the highest fatality rates because of limited driving experience and immaturity that often results in risk-taking. Washington's Graduated Drivers Licensing (GDL) process seeks to reduce the risk to young drivers by gradually introducing teens to full driving privileges. The GDL program directs that novice drivers have nighttime driving restrictions and passenger limits. After adopting components of the GDL system, California reported a 5% reduction in crashes and a 10% reduction in traffic convictions for drivers 16 and 17 and Oregon saw a 16% reduction in crashes for male drivers ages 16 and 17. When understood and enforced, graduated licensing saves lives. Because Washington's GDL program is new, however, there is still confusion and misinformation about the rules for graduated licensing.

The CDR State Committee recommends:

- Educate parents, law enforcement and teens about the new GDL program and its importance for teen safety.
- Enforce the GDL law. Studies of states that have a GDL law show it does reduce teen injury and death, but only when it is stringently and consistently enforced.

Recommendation 2: Enforce Primary Seatbelt Law

Using a seatbelt can mean the difference between life and death, especially for teen drivers. The CDR teams reported that in the vehicle deaths of 10-17 year olds that they reviewed, 7 out of 10 teens were *not* wearing seatbelts. Washington's primary seatbelt law allows law enforcement to stop and ticket a driver for non-use of a safety belt without requiring the driver to be cited for or have committed another offense.

The numbers are even more dismal for drivers who drink and drive. Experts estimate that unbelted drivers account for three quarters of all impaired driving fatalities. In Washington State, a strictly enforced primary seatbelt law can reduce alcohol-related fatalities by 10%, based on estimates from the National Highway Traffic Safety Administration.

The CDR State Committee recommends:

• Strict enforcement of the primary seatbelt law by all law enforcement personnel.

Recommendation 3: Enhance DUI Laws

Alcohol is a factor in four out of 10 Washington crashes and the costs to our society are high: in 1996, alcohol-related crashes cost Washington citizens more than \$1.4 billion in monetary costs and \$2.0 billion in quality-of-life losses. The effects are particularly devastating when the deaths cut short the life of a child or teenager.

The CDR teams reported that drugs or alcohol were a factor in one-quarter (25%) of the MVC deaths of children who were passengers and 32% of the deaths where a teenager was the driver. Continued efforts to reduce drinking and driving are essential to preventing such deaths.

The CDR State Committee recommends:

• Exploring enhanced DUI penalties for individuals who drive while impaired with passengers under age 18 in the car.

Other Issues for Consideration

Complete and accurate information concerning child deaths is vital to identifying effective prevention strategies. To improve available data, the CDR State Committee recommends:

- *Increasing technical support to local teams* to help teams better understand and use MVC data to design and implement interventions specific to their communities.
- Adding an "auto racing" category to CDR data system. Local teams have reported that teen car racing may be a factor in a percentage of crashes, but no other agencies are currently collecting specific data on racing.
- Explore data linkages between traffic safety data, medical examiner records, emergency room and trauma registry data and other pertinent databases such as the state CDR database to improve the quality of information available to design and evaluate prevention strategies.

PRIORITY: MOTOR VEHICLE CRASH DEATHS AND INJURIES

What Can WE Do About Motor Vehicle Crash Deaths?

Parents & Caregivers

- Learn about the Graduated Drivers Licensing rules and enforce them with your teen driver.
- Insist that all passengers and drivers use seatbelts.
- Encourage teens never to drink and drive.
- Model seatbelt use and sober driving behaviors.

Legislative Action

- Support Graduated Drivers Licensing and its enforcement.
- Support the primary seatbelt law and its enforcement.
- Toughen penalties for driving under the influence while children are in the car.
- Encourage education to reduce drinking and driving.

Law Enforcement

- Strictly enforce Graduated Drivers Licensing.
- Help to educate parents and drivers about GDL.
- Strictly enforce primary seatbelt laws, especially with teen drivers.
- Support enhanced penalties for adults who drive impaired while children are in the car.

Media

- Inform the public about Graduated Drivers Licensing requirements.
- Inform the public about the benefits of seatbelt use.
- Inform the public about the costs of impaired driving and risks to children.

FOR MORE INFORMATION ...

About CDR

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The CDR 1999 Progress Report

A full report by the CDR Program, including recommendations by local CDR teams is available from the address above or at: www.doh.wa.gov/cfh/mch/MCHAssesshome.htm.

Resources on SIDS

The following sources were used for this report:

- Child Death Review data provided by the Washington State Department of Health, Child Death Review (CDR) state database, 1999 and 2000.
- Vital Statistics data provided by the Washington State Department of Health, Center for Health Statistics.
- PRAMS data provided by the Washington State Department of Health, Pregnancy Risk Assessment Monitoring System survey. PRAMS is an ongoing population-based surveillance system, sponsored by the Centers for Disease Control and Prevention (CDC) and implemented in Washington by the state Department of Health. Medicaid status was determined with data from the First Steps Database, Department of Social and Health Services, Research and Data Analysis.
- "Assessment of Infant Sleeping Position Selected States, 1996," *Morbidity and Mortality Weekly Report*: October 23, 1998/47 (41): p. 873-877.
- Overpeck, Mary, Dr. P.H, et al. "National Underascertainment of Sudden Unexpected Infant Deaths Associated with Deaths of Unknown Cause," Pediatrics Vol. 109, No. 2, February 2002: p. 274-283.
- SIDS Foundation of Washington website: www.sidsofwa.org.
- SIDS Alliance website: www.sidsalliance.org.

Resources on Motor Vehicle Crash Deaths and Injuries

The following sources were used for this report:

- Child Death Review data provided by the Washington State Department of Health, Child Death Review (CDR) state database, 1999 and 2000.
- Vital Statistics data provided by the Washington State Department of Health Vital Statistics, Center for Health Statistics.
- Associated Press. "New teen-driving law rarely enforced," *The Olympian*, February 25, 2002.
- CDC State Injury Indicators Report, Centers for Disease Control and Prevention, December 2001.
- Community Guide to Preventive Services website: www.thecommunityguide.org/home f.html.
- Dinh-Zarr, T.B., et al. "Task Force on Community Preventive Services. Reviews of evidence regarding interventions to increase use of safety belts," American Journal of Preventive Medicine 21 (4S) 2001: p. 48-65.
- Harborview Injury Prevention Center website: depts.washington.edu/hiprc/
- McCartt, A. and Shabanova, P. "Teenage Seatbelt Use: White Paper," Preusser Research Group Inc., July 8, 2002.
- "Motor-Vehicle Occupant Injury: Strategies for Increasing Use of Child Safety Seats, Increasing Use of Safety Belts, and Reducing Alcohol-Impaired Driving" *Morbidity and Mortality Weekly Report*, Centers for Disease Control and Prevention, May 18, 2001, 50 (RR07): p. 1-13.
- Background information obtained from the National Highway Traffic Safety Administration (NHTSA) websites: http://www.nhtsa.dot.gov/people/
- Quinlan, K., et.al. "Characteristics of Child Passenger Deaths and Injuries Involving Drinking Drivers," JAMA 283 (17), May 3, 2000: p. 2249-2252.

Endnotes

- ¹ The CDR data provided throughout this document include unknowns in the denominator. Preventability was missing or unknown in 18% of the MVC reviews and 50% of the SIDS reviews.
- ² Position at discovery was unknown in 22% of the deaths, while firmness of sleep surface was unknown in 44% of the deaths reviewed. Exposure to secondhand smoke was unknown in 31% of the reviews. CDR does not ask about overheating.
- ³ Sleeping location was unknown in 5% of the deaths reviewed.
- ⁴ Prenatal smoking was unknown in 40% of the reviews.
- ⁵ The driver's age was missing in 12% of the reviews.
- ⁶ Seatbelt use was unknown in 14% of the deaths to children ages 10-17.
- ⁷ Driver impairment due to drugs or alcohol was reported as unknown in 25% of the MVC reviews.

ACKNOWLEDGEMENT

Members of the Washington State Child Death Review Committee participated in the work groups that drafted the recommendations and provided thoughtful review of the information contained in this report.

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